# Customer Care Solutions
# NHM-10 Series Transceivers

# 4 - Service Tools

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# JBV-1 Docking Station and MJF-31 Adapter

The JBV-1 Docking Station has been designed for calibration and software update use.

The MJF-31 Docking Station Adapter makes signal connections to the phone. JBV-1 and MJF-31 are used as one unit.

JBV-1 main electric functions are:

- adjustable VBATT calibration voltage, current measurement limit voltage ”VCHAR”, current measurement calibration current ”ICHAR”
- adjustable ADC calibration voltage via BTEMP and BSI signal
- BTEMP and BSI calibration resistor
- signals from FBUS to the phone via parallel jig
- control via FBUS or USB
- Flash OK/FAIL indication

In calibration mode JBV-1 is powered by external power supply 11-16V DC. In flashing power for the phone can be taken from FPS-8 or external power supply 11-16V DC.

## Product Code

| | | |
|---|---|---|
| JBV-1 | Docking Station: | 0770298 |
| MJF-31 | Docking Station Adapter: | 0770478 |

## View of MJF-31

**Figure 1: MJF-31**

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# MJS-51 Module Jig

The MJS-51 Module Jig is used for testing of the following modules:

- User Interface
- Baseband and RF on system module

## Product Code

MJS-51 Module Jig: 0770579

## View of MJS-51

Figure 2: MJS-51

*Note: The nominal supply voltage for MJS-51 is +6.0 V.
The supply voltage must not exceed +12.0 V (min 5V).
Supply jig only when S1 = regulated position.


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# MJS-93 Soldering Jig

The Soldering Jig MJS-93 is used for soldering and as a rework jig for system module.

## Product Code

MJS-93 Module Jig: 0770524

## View of MJS-93

**Figure 3:** MJS-93

# SRT-7 Camera Removal Tool

The Camera Removal Tool SRT-7 is used to remove the camera from its locking connector.

## Product Code

SRT-7 Camera Removal Tool: 0770526

## View of SRT-7

**Figure 4:** SRT-7

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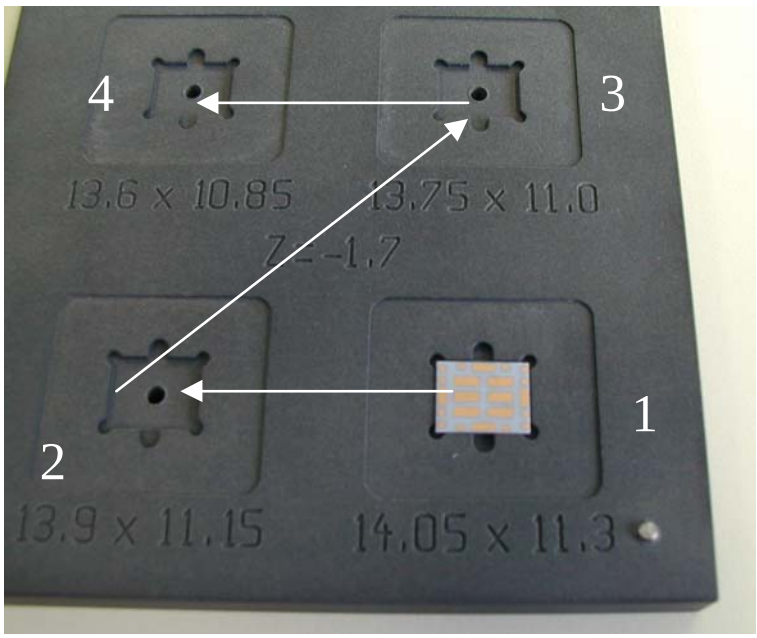
# LRK-2 / 3 LGA component rework kits 1 & 2

| Type designator | Description | Part code |
|---|---|---|
| LRK-2 (0273645) Kit 1 | | |
| MJS-76 | LGA Re-work Jig | 0770417 |
| SES-2 | Stencil | 0770415 |
| SPS-2 | Spreader | 0770471 |
| LRK-3 (0273646) Kit 2 | | |
| SES-2 | Stencil | 0770415 |
| SPS-2 | Spreader | 0770471 |

## Rework procedure

Due to the large mechanical tolerance of the power amplifiers the following procedure is necessary:

1 Put power amplifier into the MJS-76 re-work jig, the PA should be placed in the best fit location, this is determined by firstly placing it in the largest location if this is to large re-position the pa in the next size location, this should be carried out until the best fit location is found.





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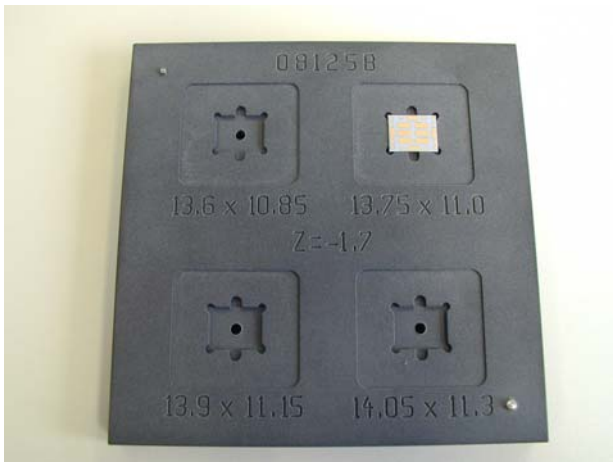
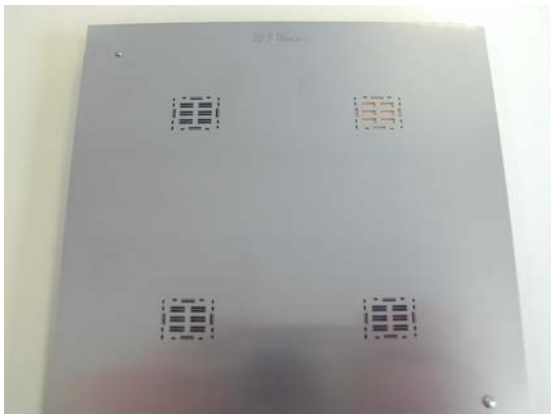
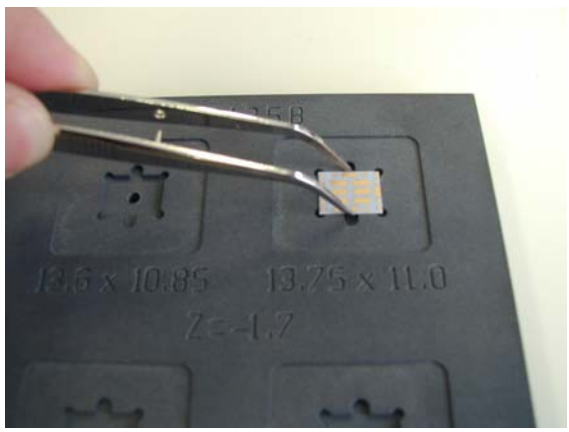
2 Once the best fit location has been found, leave the PA there and put stencil on top of the jig and PA.



3 Put soldering paste on the PA properly.

4 Remove stencil and the PA from the jig.




5 Start soldering process.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# MJS-76 PA LGA re-work jig (Product code 0770417)

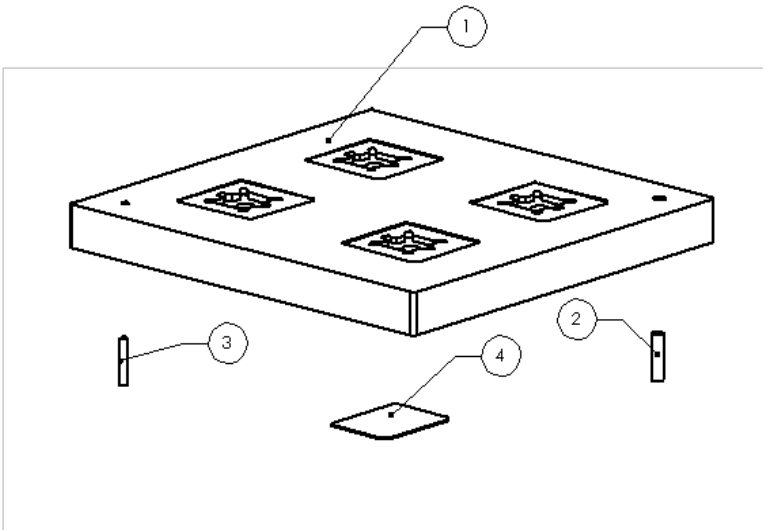
## Introduction

This tool is used in LGA type component reworking purposes in central service centers,

## Part list

| Part number | Name of Part | Material code | Drawing number | Qty |
|---|---|---|---|---|
| 1 | Frame | | SME5S910 | 1 |
| 2 | Cylindrical pin 3x12 | 640b003 | | 1 |
| 3 | Cylindrical pin 2x12 | 640B012 | | 1 |
| 4 | Type label | 9380601 | | 1 |

## Exploded view





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# FPS-8 Flash Prommer (Sales Pack)

The Flash Prommer FPS-8 is used with e.g. FLA-21 and JBV-1. Power is supplied to FPS-8 from the Universal Power Supply.

The sales pack includes:

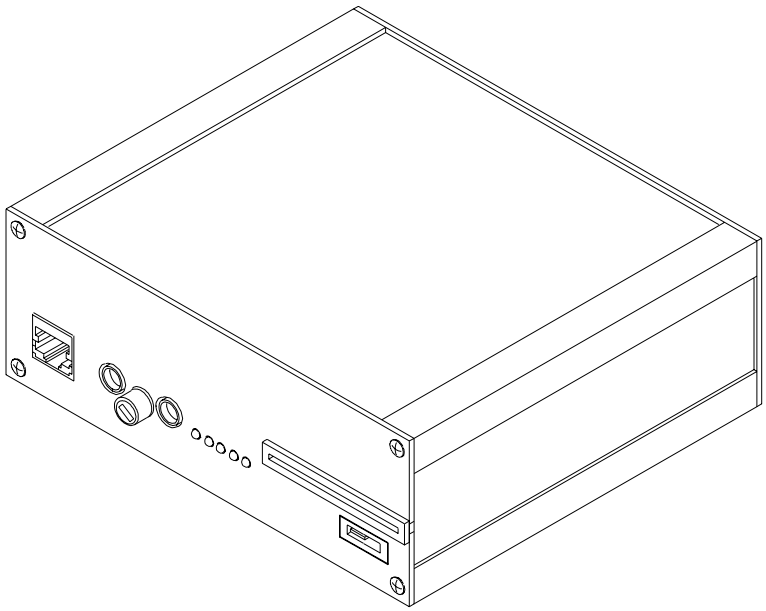
| | |
|---|---|
| - FPS-8 Flash Prommer | 0750123 |
| - FPS-8 Activation Sheet | 9359289 |
| - Universal Power Supply | 0680032 |
| - AXS-4 Service Cable (D9-D9) | 0730090 |
| - Printer cable | 0730029 |

## Sales package code

FPS-8 Flash Prommer: 0080321

## View of FPS-8

Figure 5: FPS-8

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# FPS-8C Parallel Flash Prommer (Sales Pack)

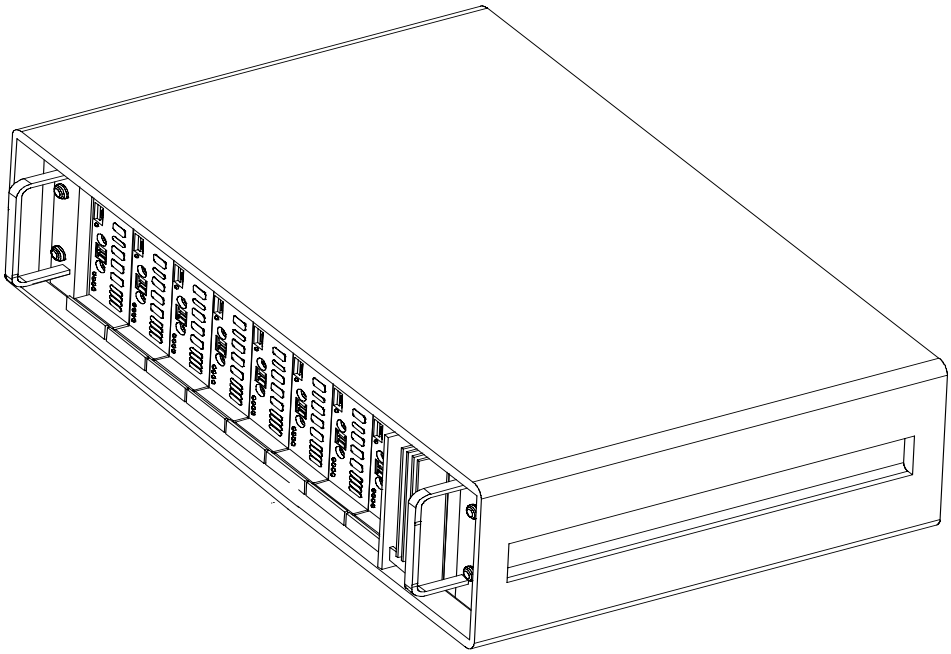
The Parallel Flash Prommer FPS-8C is used with MJF-6 and JBV-1. Flash programming can be done to maximum of 8 phones parallel. FPS-8C consists of eight SF11C programming cards. SF11C card is functionally identical to FPS-8.

## Sales package code

FPS-8C Parallel Flash Prommer: 0080396

## View of FPS-8C

**Figure 6: FPS-8C**



# ACF-8 Universal Power Supply

ACF-8 Universal Power Supply is used to power FPS-8. ACF-8 has 6 V DC and 2.1 A output.

## Product Code

ACF-8 Universal Power Supply: 0680032

## View of ACF-8

**Figure 7:**

Picture will be added here later.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# FLA-48 POS (Point Of Sale) Flash Loading Adapter

The POS Flash Loading Adapter FLA-48 is used in place of the phone's normal battery during service, to supply a controlled operating voltage and to connect to pads which are under the SIM card.

## Product Code

FLA-48 POS Flash Loading Adapter: 0770582

## View of FLA-48

Figure 8: FLA-48

# FLC-2 DC Cable

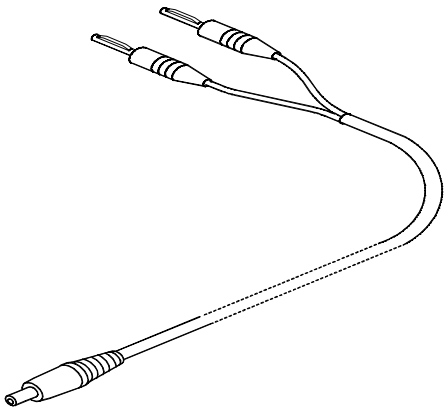
The FLC-2 is used to supply a controlled operating voltage to FLA-48 adapter.

## Product Code

FLC-2 DC Cable: 0730185

## View of FLC-2

Figure 9: FLC-2

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# AXS-4 Service Cable

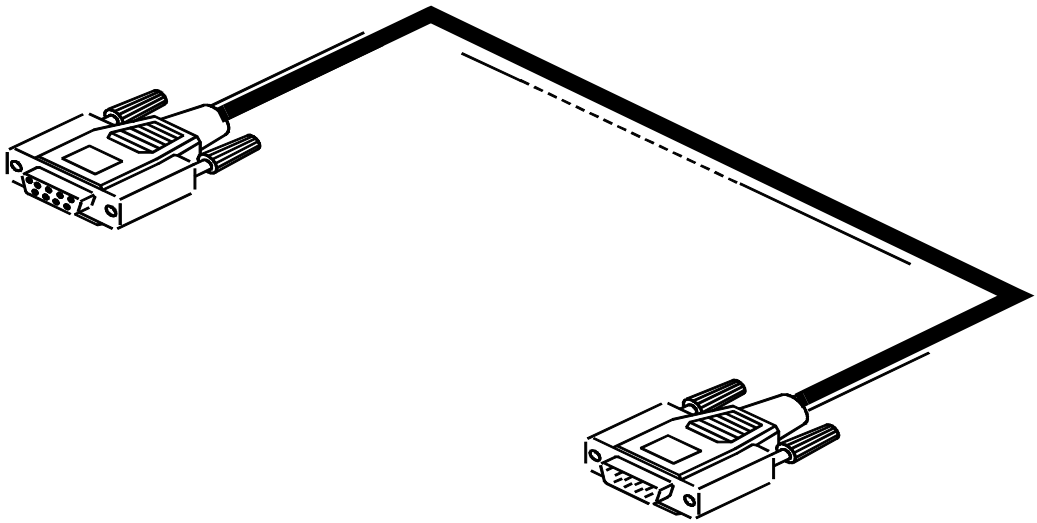
The AXS-4 D9-D9 Service Cable is used to connect two 9 pin D connectors e.g. between PC and FPS-8. Cable length is 2 meters.

## Product code

AXS-4 D9-D9 Service Cable: 0730090

## View of AXS-4

Figure 10: AXS-4



# XCS-1 Service Cable

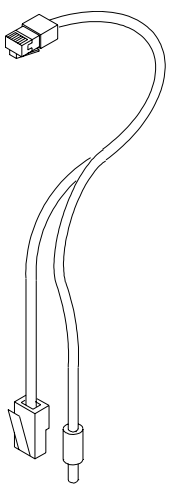
The XCS-1 Service Cable is used to connect FLS-4 to FLA-48.

## Product code

XCS-1 Service Cable: 0730218

## View of XCS-1

Figure 11: XCS-1

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# SW Security Device PKD-1

SW security device is a piece of hardware enabling the use of the service software when connected to the parallel (LPT) port of the PC. Whithout the dongle present it is not possible to use the service software. Printer or any such device can be connected to the PC through the dongle if needed.

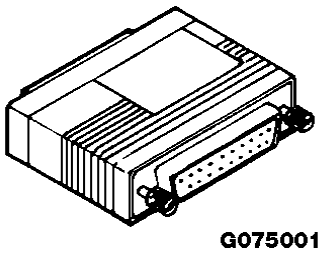
Caution: Make sure that you have switched off the PC and the printer before making connections!

Caution: Do not connected the PKD-1 to the serial port. Product Code

SW Security Device PKD-1: 0750018

## View of SW Security Device

Figure 12: PKD-1




# FLS-4S POS (Point Of Sale) Flash Device (Sales Pack)

FLS–4S is a dongle and flash device incorporated into one package, developed specifically for POS use.

## Product Code

| | |
|---|---|
| FLS-4S Sales Pack – Europe/Africa | 0080541 |
| FLS-4S Sales Pack –APAC | 0080542 |
| FLS-4S Sales Pack –Americas | 0080543 |

## View of FLS-4S

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# PCS-1 Power Cable

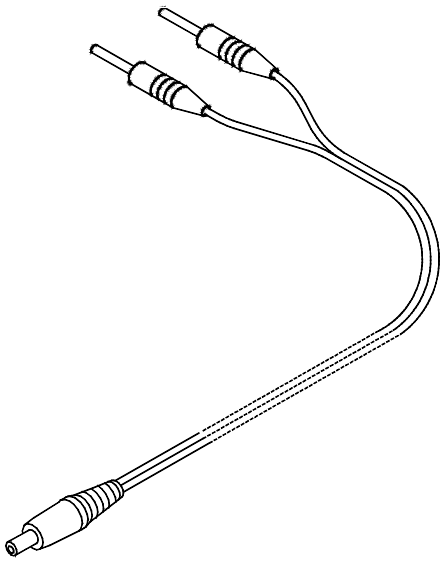
The PCS-1 Power Cable (DC) is used to connect e.g. JBV-1 or MJS-31 to FPS-8.

## Product Code

PCS-1 Power Cable: 0730012

## View of PCS-1

Figure 13: PCS-1



# XRF-1 RF Cable

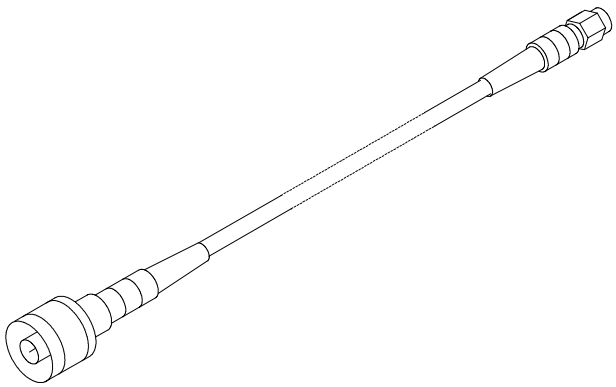
RF cable XRF-1 is used to connect e.g. MJS-51, CPL-5, TDS-10 or RA7 to RF measurement equipment..

## Product code

XRF-1 RF Cable: 0730085

## View of XRF-1

Figure 14: XRF-1

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# XRS-12 RF Cable

The XRS-12 RF cable is used for tuning with the JBV-1 / MJF-31.

## Product code

XRS-12 RF Cable: 0730274

## View of XRS-12

Figure 15: XRS-12

# DAU-9S MBUS Cable

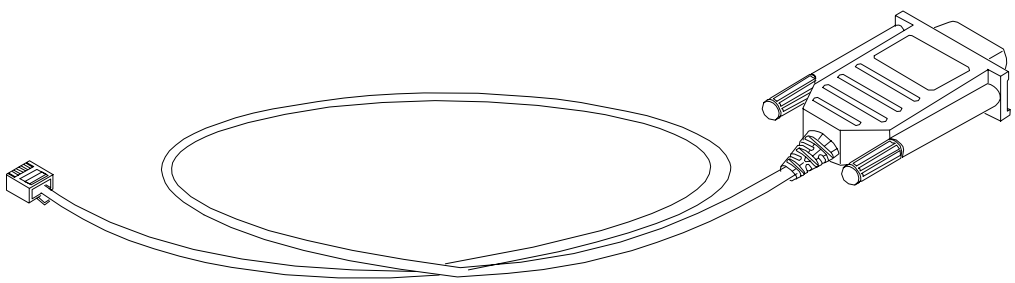
The MBUS Cable DAU-9S has a modular connector, and is used with between PC's serial port and e.g. MJS-51, FLA-48, or JBV-1

## Product Code

DAU-9S MBUS Cable: 0730108

## View of DAU-9S

Figure 16: DAU-9S

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# SCB-3 DC Cable

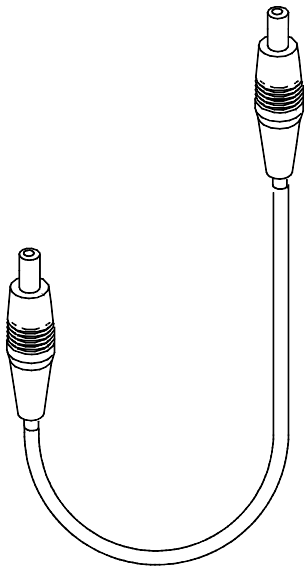
The DC Cable SCB-3 is used to connect e.g. JBV-1 to the phone.

## Product Code

SCB-3 DC Cable: 0730114

## View of SCB-3

Figure 17: SCB-3



# XCS-4 Modular Cable

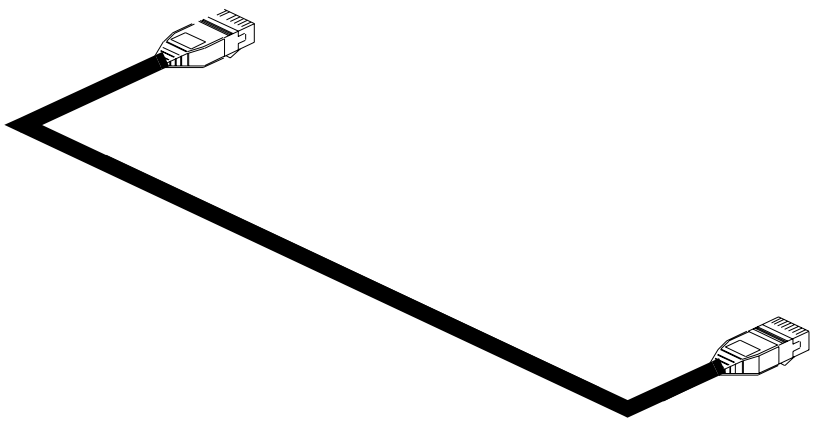
XCS-4 is a shielded cable (one specially shielded conductor) modular cable for flashing and service purposes.

## Product code

XCS-4 Modular Cable: 0730178

## View of XCS-4

Figure 18: XCS-4

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# Printer Cable

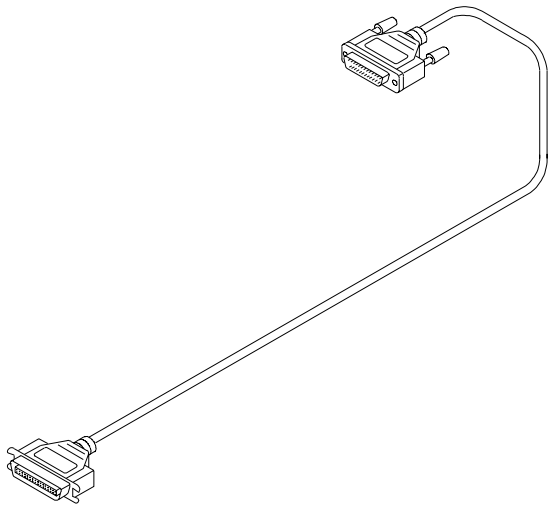
This cable is used to connect the PC to FPS-8.

## Product code

Printer Cable: 0730029

## View of Printer Cable

Figure 19: Printer Cable

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